Commission Regulation (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units (Text with EEA relevance)

COMMISSION REGULATION (EU) No 1253/2014

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products[(1)], and in particular Article 15(1) thereof,

Whereas:

(1) Under Directive 2009/125/EC energy-related products representing significant volumes of sales and trade, having significant environmental impact within the Union and presenting significant potential for improvement in terms of their environmental impact, without entailing excessive costs, are to be covered by an implementing measure or a self-regulation measure regarding ecodesign requirements.

(2) The Commission has assessed the technical, environmental and economic aspects of ventilation units. The assessment showed that ventilation units are placed on the Union market in large quantities. The energy consumption in the use phase is the most significant environmental aspect of ventilation units, presenting significant potential for cost-effective energy savings and greenhouse gas emission reduction.

(3) Fans are an important part of ventilation units. Generic minimum energy efficiency requirements for fans have been established in Commission Regulation (EU) No 327/2011[(2)]. The power consumption of the ventilation functions of fans which are part of ventilation units is covered by the minimum energy performance requirements of that Regulation, but many ventilation units use fans not covered by it. It is therefore necessary to introduce implementing measures for ventilation units.

(4) A distinction should be made between measures applying to residential ventilation units and those applying to non-residential ventilation units on the basis of their individual air flow rate because two different sets of measurement standards are used in practice.

(5) Small ventilation units with an electric power input of less than 30 W per air stream should be exempted from the requirements of this Regulation, except for information requirements. Those units are designed for many different applications, predominantly working intermittently and with supplementary functions only, for example in

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bathrooms. Including those would represent a considerable administrative burden in terms of market surveillance because of large sales numbers, while contributing only to a small share of the energy saving potential. However, considering that they offer similar functionalities to other ventilation units, their possible inclusion should similarly be addressed in the review of this Regulation. Furthermore, ventilation units specifically designed to operate exclusively for emergency purposes or in exceptional or hazardous environments should also be exempted, as they are used rarely and for a short time. The exemptions also clarify that multifunctional units which predominantly heat or cool and kitchen range hoods are excluded. The Commission has carried out preparatory studies to analyse the technical, environmental and economic aspects of residential and non-residential ventilation units. The studies have been developed together with stakeholders and interested parties from the Union and third countries, and the results have been made publicly available.

(6) The environmental parameter of the products covered which has been identified as the most significant for the purposes of this Regulation is energy consumption in the use phase. The annual electricity consumption of products subject to this Regulation was estimated at 77,6 TWh in the Union in 2010. At the same time, these products save 2 570 PJ on energy for heating space. In aggregate, using a primary energy conversion coefficient of 2,5 for electricity, the energy balance is 1 872 PJ primary energy of annual saving in 2010. Without specific measures, the aggregate saving is projected to grow to 2 829 PJ in 2025.

(7) The preparatory studies show that the energy consumption of products subject to this Regulation can be significantly reduced. The combined effect of the ecodesign requirements set out in this Regulation and in Commission Delegated Regulation (EU) No 1254/2014[(3)] is expected to result in an aggregate increase in savings by 1 300 PJ (45 %) to a level of 4 130 PJ in 2025.

(8) The preparatory studies show that requirements regarding the other ecodesign parameters referred to in Part 1 of Annex I to Directive 2009/125/EC are not necessary for ventilation units as energy consumption in the use phase is by far the most important environmental parameter.

(9) The ecodesign requirements should be introduced gradually in order to provide a sufficient timeframe for manufacturers to re-design products subject to this Regulation. The timing should take into account the impact on costs for end-users and manufacturers, in particular small and medium-sized enterprises, while ensuring that the environmental performance of ventilation units is improved without unnecessary delay.

(10) Product parameters should be measured and calculated using reliable, accurate and reproducible methods which take into account recognised state-of-the-art measurement and calculation methods, including, where available, harmonised standards adopted by the European standardisation bodies following a request by the Commission, in accordance with the procedures laid down in Regulation (EU) No 1025/2012 of the European Parliament and of the Council[(4)].

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(11) Benchmarks for currently available ventilation unit types with high energy efficiency should be identified in the implementing measure on the basis of information gathered during the preparation of the measure, in order that manufacturers can make use of this assessment to evaluate alternative design solutions and the achieved environmental performance of the product against benchmarks. This will help to ensure a wide availability and easy accessibility of information, in particular for small and medium-sized enterprises and very small firms, which will further facilitate the integration of best design technologies and facilitate the development of more efficient products for reducing energy consumption.

(12) The Consultation Forum referred to in Article 18 of Directive 2009/125/EC has been consulted.

(13) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 19(1) of Directive 2009/125/EC,

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

1 This Regulation applies to ventilation units and establishes ecodesign requirements for their placing on the market or putting into service.

2 This Regulation shall not apply to ventilation units which:

a are unidirectional (exhaust or supply) with an electric power input of less than 30 W, except for information requirements;

b are bidirectional, with a total electric power input for the fans of less than 30 W per air stream, except for information requirements;

c are axial or centrifugal fans only equipped with a housing in terms of Regulation (EU) No 327/2011;

d are exclusively specified as operating in a potentially explosive atmosphere as defined in Directive 94/9/EC of the European Parliament and of the Council[(5)];

e are exclusively specified as operating for emergency use, for short periods of time, and which comply with the basic requirements for construction works with regard to safety in case of fire as set out in Regulation (EU) No 305/2011 of the European Parliament and of the Council[(6)];

f are exclusively specified as operating:

(i) where operating temperatures of the air being moved exceed 100 °C;

(ii) where the operating ambient temperature for the motor, if located outside the air stream, driving the fan exceeds 65 °C;

(iii) where the temperature of the air being moved or the operating ambient temperature for the motor, if located outside the air stream, are lower than – 40 °C;

(iv) where the supply voltage exceeds 1 000 V AC or 1 500 V DC;

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(v) in toxic, highly corrosive or flammable environments or in environments with abrasive substances;

g include a heat exchanger and a heat pump for heat recovery or allowing heat transfer or extraction being additional to that of the heat recovery system, except heat transfer for frost protection or defrosting;

h are classified as range hoods covered by Commission Regulation (EU) No 66/2014[7] on kitchen appliances.

Article 2

Definitions

For the purposes of this Regulation the following definitions shall apply:

(1) 'ventilation unit (VU)' means an electricity driven appliance equipped with at least one impeller, one motor and a casing and intended to replace utilised air by outdoor air in a building or a part of a building;

(2) 'residential ventilation unit' (RVU) means a ventilation unit where:

(a) the maximum flow rate does not exceed 250 m^3/h;

(b) the maximum flow rate is between 250 and 1 000 m^3/h, and the manufacturer declares its intended use as being exclusively for a residential ventilation application;

(3) 'non-residential ventilation unit' (NRVU) means a ventilation unit where the maximum flow rate of the ventilation unit exceeds 250 m^3/h, and, where the maximum flow rate is between 250 and 1 000 m^3/h, the manufacturer has not declared its intended use as being exclusively for a residential ventilation application;

(4) 'maximum flow rate' is the declared maximum air volume flow rate of a ventilation unit that can be achieved with integrated or separately co-supplied controls at standard air conditions (20 °C) and 101 325 Pa, where the unit is installed complete (e.g. including clean filters) and according to the manufacturer's instructions, for ducted RVUs the maximum flow is related to the air flow at 100 Pa of external static pressure difference, and for non-ducted RVUs to the air flow at the lowest achievable total pressure difference to be chosen from a set of values of 10 (minimum)-20-50-100-150-200-250 Pa, whichever is equal or just below the measured pressure difference value;

(5) 'unidirectional ventilation unit' (UVU) means a ventilation unit producing an air flow in one direction only, either from indoors to outdoors (exhaust) or from outdoors to indoors (supply), where the mechanically produced air flow is balanced by natural air supply or exhaust;

(6) 'bidirectional ventilation unit' (BVU) means a ventilation unit which produces an air flow between indoors and outdoors and is equipped with both exhaust and supply fans;

(7) 'equivalent ventilation unit model' means a ventilation unit with the same technical characteristics according to the applicable product information requirements, but placed on the market as a different ventilation unit model by the same manufacturer, authorised representative or importer.

For the purposes of Annexes II to IX, additional definitions are set out in Annex I.

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Article 3

Ecodesign requirements

1 From 1 January 2016 RVUs shall comply with the specific ecodesign requirements set out in Annex II, point 1.

2 From 1 January 2016 NRVUs shall comply with the specific ecodesign requirements set out in Annex III, point 1.

3 From 1 January 2018 RVUs shall comply with the specific ecodesign requirements set out in Annex II, point 2.

4 From 1 January 2018 NRVUs shall comply with the specific ecodesign requirements set out in Annex III, point 2.

Article 4

Information requirements

1 From 1 January 2016 manufacturers, their authorised representatives and importers of RVUs shall comply with the information requirements set out in Annex IV.

2 From 1 January 2016 manufacturers, their authorised representatives and importers of NRVUs shall comply with the information requirements set out in Annex V.

Article 5

Conformity assessment

1 Manufacturers of ventilation units shall carry out the conformity assessment laid down in Article 8 of Directive 2009/125/EC using the internal design control system set out in Annex IV to that Directive or the management system set out in Annex V to that Directive.

For the purposes of the conformity assessment of RVUs, calculation of the specific energy consumption requirement shall be carried out in accordance with Annex VIII to this Regulation.

For the purposes of the conformity assessment of NRVUs, measurements and calculations for the specific ecodesign requirements shall be carried out in accordance with Annex IX to this Regulation.

2 The technical documentation file compiled in accordance with Annex IV to Directive 2009/125/EC shall contain a copy of the product information set out in Annexes IV and V to this Regulation.

Where the information included in the technical documentation for a particular ventilation unit model has been obtained by calculation on the basis of design, or extrapolation from other ventilation units, or both, the technical documentation shall include the following information:

a details of such calculations or extrapolations, or both;

b details of tests undertaken by manufacturers to verify the accuracy of the calculations and extrapolations;